

Remarks

Claims 1 to 10 and 26 to 32 are pending and under consideration. Claims 11 to 25 are also pending, but have been withdrawn from consideration.

Rejection in View of Drmanac and Gingeras

The Examiner rejected claims 1 to 10 and 26 to 32 under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Patent No. 6,309,824 ("Drmanac"), in view of U.S. Patent No. 6,228,575 ("Gingeras"). See Action, page 3. Applicants respectfully traverse.

For a proper obviousness rejection, the Examiner must establish that the cited references would have suggested all of the claim elements to one of ordinary skill. See MPEP § 2143.03.

Independent Claim 1

In the Examiner's rejection of claims 1 to 10 and 26 to 32, the Examiner does not specifically address the claim language of the rejected claims. Nor does the Examiner specifically point out where Drmanac shows the elements of the rejected claims. Instead, the Examiner appears to cite language from the abstract of Drmanac and certain other unspecified sections of Drmanac, and then implies that the cited sections show certain aspects of the claims by acknowledging that Drmanac does not show certain other elements of certain claims. See Action at pages 3 to 4.

However, the cited sections of Drmanac do not describe a method according to claim 1, which comprises "exposing a substrate containing a first feature comprising an experimental target-specific probe and a control-specific probe to a labeled control

target, such that the labeled control target binds specifically to control-specific probe bound to the substrate....” Specifically, the cited sections of Drmanac discuss a method comprising two probes and a target nucleic acid sequence. See Action at page 3. One probe is attached to a substrate (“the attached probe”). See *id.* The second probe comprises a label (“the labeled probe”). See *id.* The target nucleic acid sequence comprises two adjacent portions. See *id.* The probes and nucleic acids are treated such that the first portion of the target nucleic acid hybridizes to the attached probe and the second portion of the target nucleic acid hybridizes to the labeled probe. See *id.* After hybridization of both probes, the probes are affixed, and the labeled probe, which is now fixed to the array, is detected. See *id.* Thus, Drmanac does not discuss “exposing a substrate containing a first feature comprising an experimental target-specific probe and a control-specific probe to a labeled control target, such that the labeled control target binds specifically to control-specific probe bound to the substrate....”

Furthermore, even if the labeled probe of Drmanac is incorrectly construed as a labeled control target, Drmanac still fails to show “exposing a substrate containing a first feature comprising an experimental target-specific probe and a control-specific probe to a labeled control target, such that the labeled control target binds specifically to control-specific probe bound to the substrate....” Specifically, the labeled probe of Drmanac specifically hybridizes to the target nucleic acid sequence, **which is not bound to the substrate**. See *id.* Thus, even if the labeled probe of Drmanac is incorrectly characterized as a labeled control target and the target nucleic acid is incorrectly characterized as a control specific probe, Drmanac still does not show a labeled control

target binding to a control specific probe bound to the substrate. Thus, the Examiner failed to establish that Drmanac discloses “exposing a substrate containing a first feature comprising an experimental target-specific probe and a control-specific probe to a labeled control target, such that the labeled control target binds specifically to control-specific probe bound to the substrate....” That language is included in claim 1.

Gingeras fails to remedy at least that deficiency of Drmanac. Because Gingeras fails to remedy that deficiency of Drmanac, applicants need not address the Examiner’s allegations regarding Gingeras. Accordingly, for at least that reason, the Examiner has failed to establish that claim 1 would have been obvious over Drmanac in view of Gingeras. Claims 2 to 9 depend from claim 1. Thus, for the reasons discussed above for claim 1, the Examiner fails to establish that claims 2 to 9 would have been obvious over Drmanac in view of Gingeras. Because the Examiner fails to establish that claims 1 to 9 would have been obvious for at least the reasons discussed above, applicants need not address the Examiner’s contentions concerning other elements of those claims. By not addressing those contentions, applicants in no way acquiesce to those contentions.

Applicants respectfully request reconsideration and withdrawal of the § 103 rejection of claims 1 to 9 over Drmanac in view of Gingeras.

Independent Claim 10

As discussed above, the Examiner does not specifically address the claim language of the rejected claims. See Action, page 3. Nor does the Examiner specifically point out where Drmanac shows the elements of the rejected claims. Instead, the Examiner appears to cite language from the abstract of Drmanac and

certain other unspecified sections of Drmanac, and then implies that the cited sections show certain aspects of the claims by acknowledging that Drmanac does not show certain other elements of certain claims. See Action at pages 3 to 4.

As discussed above, the cited sections of Drmanac discuss a particular orientation of two probes and a target such that a first probe attached to a substrate binds a target nucleic acid sequence, which is bound by a second labeled probe. However, the cited sections of Drmanac do not show a method according to claim 10, which comprises “exposing a substrate containing a feature comprising an experimental target probe to a labeled control target and a labeled experimental target, such that the labeled control target binds to experimental target probe bound to the substrate....”

Furthermore, even if the labeled probe of Drmanac is incorrectly construed as a labeled control target, Drmanac still fails to show “exposing a substrate containing a feature comprising an experimental target probe to a labeled control target and a labeled experimental target, such that the labeled control target binds to experimental target probe bound to the substrate....” Specifically, as discussed above, Drmanac does not show a method wherein “the labeled control target binds to experimental target probe **bound to the substrate....**” Thus, the Examiner failed to establish that Drmanac discloses “exposing a substrate containing a feature comprising an experimental target probe to a labeled control target and a labeled experimental target, such that the labeled control target binds to experimental target probe bound to the substrate....” That language is included in claim 10.

Gingeras fails to remedy the deficiencies of Drmanac. Accordingly, for at least that reason, the Examiner has failed to establish that claim 10 would have been obvious

over Drmanac in view of Gingeras. Because the Examiner fails to establish that claim 10 would have been obvious for at least the reasons discussed above, applicants need not address the Examiner's contentions concerning other elements of claim 10. By not addressing those contentions, applicants in no way acquiesce to those contentions.

Applicants respectfully request reconsideration and withdrawal of the § 103 rejection of claim 10 over Drmanac in view of Gingeras.

Independent Claims 27, 31, and 32

As discussed above, the Examiner does not specifically address the claim language of the rejected claims. See Action, page 3. Nor does the Examiner specifically point out where Drmanac shows the elements of the rejected claims. Instead, the Examiner appears to cite language from the abstract of Drmanac and certain other unspecified sections of Drmanac, and then implies that the cited sections show certain aspects of the claims by acknowledging that Drmanac does not show certain other elements of certain claims. See Action at pages 3 to 4.

As discussed above, the cited sections of Drmanac discuss a particular orientation of two probes and a target such that a first probe attached to a substrate binds a target nucleic acid sequence, which is bound by a second labeled probe. However, the cited sections of Drmanac do not show methods according to claims 27, 31, and 32, which comprise "exposing a substrate containing a first feature comprising an experimental target-specific probe and a control-specific probe to a labeled control target and a labeled experimental target, such that the labeled control target binds specifically to control-specific probe bound to the substrate...."

Furthermore, even if the labeled probe of Drmanac is incorrectly construed as a labeled control target, Drmanac still fails to show “exposing a substrate containing a first feature comprising an experimental target-specific probe and a control-specific probe to a labeled control target and a labeled experimental target, such that the labeled control target binds specifically to control-specific probe bound to the substrate....” Specifically, as discussed above, Drmanac does not show a method wherein “the labeled control target binds specifically to control-specific probe **bound to the substrate....**” Thus, the Examiner failed to establish that Drmanac discloses “exposing a substrate containing a first feature comprising an experimental target-specific probe and a control-specific probe to a labeled control target and a labeled experimental target, such that the labeled control target binds specifically to control-specific probe bound to the substrate....” That language is included in each of claims 27, 31, and 32.

Gingeras fails to remedy at least that deficiency of Drmanac. Because Gingeras fails to remedy that deficiency of Drmanac, applicants need not address the Examiner’s allegations regarding Gingeras. Accordingly, for at least this reason, the Examiner has failed to establish that claims 27, 31, and 32 would have been obvious over Drmanac in view of Gingeras. Claims 28 and 29 depend from claim 27. Thus for the reasons discussed above for claim 27, the Examiner fails to establish that claims 28 and 29 would have been obvious over Drmanac in view of Gingeras. Because the Examiner fails to establish that claims 27 to 29, 31, and 32 would have been obvious for at least the reasons discussed above, applicants need not address the Examiner’s contentions concerning other elements of those claims. By not addressing those contentions, applicants in no way acquiesce to those contentions.

Applicants respectfully request reconsideration and withdrawal of the § 103 rejection of claims 27 to 29, 31, and 32 over Drmanac in view of Gingeras.

Independent Claims 26 and 30

As discussed above, the Examiner does not specifically address the claim language of the rejected claims. See Action, page 3. Nor does the Examiner specifically point out where Drmanac shows the elements of the rejected claims. Instead, the Examiner appears to cite language from the abstract of Drmanac and certain other unspecified sections of Drmanac, and then implies that the cited sections show certain aspects of the claims by acknowledging that Drmanac does not show certain other elements of certain claims. See Action at pages 3 to 4.

Claims 26 and 30 include the language “determining the ratio of the intensity of the signal from the first label to the intensity of the signal from the second label for each of the first and second features; and comparing the ratios of the intensity of the signal for the first and second features to calculate the relative amount of first and second experimental... target sequences in the sample.” The Examiner did not specifically address those elements of claims 26 and 30. Furthermore, applicants assert that Drmanac fails to show those aspects of claims 26 and 30.

Specifically, the cited sections of Drmanac discuss “detecting the labeled probe affixed to the probe in the array” and “determining the presence of the sequenced gene by detection of labeled probes bound to prespecified locations in the array”. See Action at pages 3 to 4. The Examiner failed to establish that Drmanac discloses “determining the ratio of the intensity of the signal from the first label to the intensity of the signal from the second label for each of the first and second features; and comparing the ratios of

the intensity of the signal for the first and second features to calculate the relative amount of first and second experimental... target sequences in the sample." That language is included in claims 26 and 30.

Gingeras fails to remedy the deficiencies of Drmanac. Accordingly, for at least this reason, the Examiner has failed to establish that claims 26 and 30 would have been obvious over Drmanac in view of Gingeras. Because the Examiner fails to establish that claims 26 and 30 would have been obvious for at least the reasons discussed above, applicants need not address the Examiner's contentions concerning other elements of those claims. By not addressing those contentions, applicants in no way acquiesce to those contentions.

Applicants respectfully request reconsideration and withdrawal of the § 103 rejection of claims 26 and 30 over Drmanac in view of Gingeras.

Conclusion

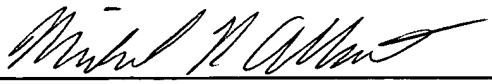
Applicants respectfully assert that the application is in condition for allowance and request issuance of a Notice of Allowance. If the Examiner does not consider the application to be in condition for allowance, applicants request that he call the undersigned at (650) 849-6658 to set up an interview.

Please grant any extensions of time required to enter this response and charge any additional required fees to Deposit Account No. 06-0916.

Respectfully submitted,

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Dated: July 8, 2004

By: 
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